

उत्तर रेलवे / NORTHERN RAILWAY

प्रधान कार्यालय / Headquarters Office,
बड़ौदा हाउस / Baroda House,
नई दिल्ली / New Delhi.

सं०:/No.260-W/969/GAD Progress/Br.(S&D)

दिनांक/Dated:- 01.07.2014.
४

The Chairman,
National Highway Authority of India,
Ministry of Road and Transport,
Plot No.G-5&6, Sector-10,
Dwarka, New Delhi - 110045.

विषय/Sub : Construction of ROB's/RUB's by NHAI – clearance/approval by Railways.

It is observed that there is a need to streamline the system in the larger interest of the work in connection with construction of ROB's/RUB's by NHAI.

2.0 Henceforth, the following guidelines/procedure may be adopted:

- (I) It is pertinent to mention that proposal for construction of ROB/RUB alongwith a conceptual sketch is required to be submitted to Northern Railway, Zonal Headquarter's office at New Delhi rather than to the Divisions or other Field Units. This proposal is then sent to the concerned Divisional Office for a Joint Feasibility Report between the sponsoring agency and Divisional officials.

Thereafter, the Headquarter office prepares a conceptual profile sketch and abstract estimate for acceptance of the sponsoring agency i.e. NHAI. After acceptance, 2% Planning and Estimate charges are to be deposited with the Railway which shall nominate executing agency/supervising agency for preparation of General Arrangement Drawing (GAD) in consultation with the concerned sponsoring agency.

- (II) The GAD has to be prepared as per a laid down guideline/procedure stipulated by the Railways from time to time. Copy of these guidelines is enclosed for ready reference as annexures. Check list and guidelines are available with the executing agency as well as the Divisions. It is generally observed that the GAD is not prepared in accordance with the guidelines and several irrelevant details like design parameters, construction methodology, type of construction etc. is indicated at the GAD stage. It is essential that GAD is prepared strictly as per the laid down guidelines so that approval is accorded expeditiously. Otherwise,

avoidable delay occurs on account of changes/corrections/modifications/deletions etc. in the GAD.

- (III) Based on the approved GAD and field investigation, the design of the structure is submitted to the Railways for approval. The delay in approval of design can be avoided if clarifications are submitted timely.
- (IV) It is further suggested that a nodal officer may be nominated by NHAI for regular interaction with Dy.CE/ROB, Northern Railway, Baroda House, New Delhi and concerned executing agency.

3.0 It is requested that suitable instructions may please be issued to all the concerned officials in order to expedite approval/clearances of GAD, design etc.

संलग्न/Encl.: - 6 pages.

N.K. Sinha

(N.K. Sinha) 1/7/14

Chief Bridge Engineer

Copy to : EDCE(B&S)-II, Railway Board. – for information and necessary action. It is requested that similar instruction may be issued to all the Railways to expedite GAD clearances.



SNO 74
मुख्य इंजीनियर/आर०सी०/प्र०का०
उत्तर रेलवे
बड़ौदा हाउस, नई दिल्ली
CHIEF ENGINEER / R.C. / H.Q.
NORTHERN RAILWAY
BARODA HOUSE
NEW DELHI

D.O.No.260-W/Circular/Policy/B,S&D

Dated : 08.11.2013.

Sub : Approval of GAD of ROB on Muzaffarnagar-Saharanpur road (SH-59), Railway Chainage-1579/20-21, Saharanpur –Roorkee section.

Ref : Member(Technical)/UPSHA's letter No.1078/Pravidhik-18(4)/2013-14/UP\$H/Lucknow.

Reference above, it is informed that references are being received from U.P.State Highway Authorities enclosing GAD prepared by consultants. For Railway purpose, this drawing is not considered as GAD. To avoid delays it is necessary that proper procedure is followed in preparation and submission of GADs. The steps to be followed in preparing the GAD has been outlined in Annexure I.

It is also pertinent to mention here that work can only be started after approval of GAD. The acceptance of Conceptual Profile Sketch by Sponsoring Agency is not an authority to start the work but it helps in preparing GAD.

I would request you to kindly direct the concerned authorities to follow proper procedure in preparation and submission of GADs. In this case, however, the above referred letter is being considered as proposal letter of sponsoring agency and necessary instructions are being issued to start process of preparation of GAD.

Yours sincerely,

DA/As above.

जकार
(P.K.SANGHI)

Shri Mukul Singhal,
Principal Secretary,
CEO, U.P. State Highways Authority,
4th Floor, Kisan Mandi Bhawan,
Vibhuti Khand Gomati Nagar,
Lucknow – 226010.

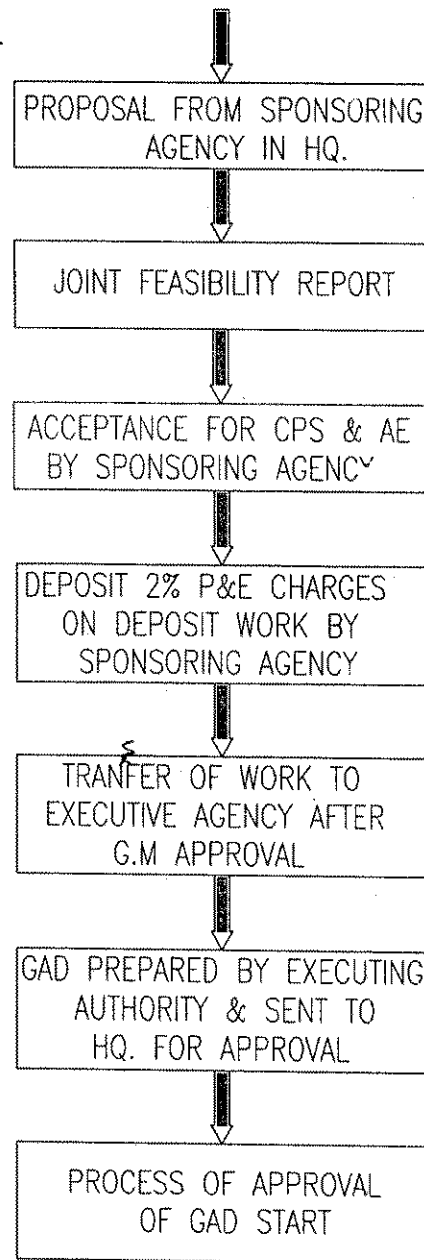
Copy to : Member(Technical)/UPSHA in reference to his above referred letter for information and necessary action please.

Procedure for processing GAD in NR Headquarter office, Baroda House.

1. Proposal is sent by sponsoring Agency for construction of ROB/RUB to Headquarter office.
2. After receiving the proposal in HQ office, Joint feasibility report is asked from sponsoring Agency with concerned divisional officials. A copy of this is endorsed to divisional office for assisting the same.
3. After receiving Joint Feasibility Report, Conceptual Profile Sketch and abstract estimate is prepared in HQ and two copies of each are sent to sponsoring agency for acceptance.
4. After acceptance of (CPS) and abstract estimate, 2% P&E charges are demanded to be deposited with Railway.
5. After depositing 2% P&E charges by sponsoring agency, approval of competent authority is taken and the work is assigned for execution or supervision to Construction organization or concerned Division as the case may be.
6. After assigning of, the work GAD is prepared by executing authority and submitted to headquarter office duly signed by Divisional officials and construction organization if it is executing/supervising agency.
7. Only thereafter, process of approval of GAD starts.

Handwritten signature/initials
D. K. S. D.

FLOW CHART FOR GAD APPROVAL (DEPOSIT WORK)





NORTHERN RAILWAY उत्तर रेलवे

No:260-W/969/GAD Prograss/Br./S&D

Sr. DEN/C/ DLI, MB, FZR, UMB & LKO

Sub: Guidelines for GAD



Headquarter Office, Baroda House

प्रधानकार्यालय, बड़ौदाहाउस

नईदिल्ली, दिनांक: 11.09.2013

Rly. has been entrusted with the construction of a large no. of ROB. It has been observed that GAD being prepared by the field units has numerous deficiencies which is causing delay in approval / finalization of GAD. Some of these deficiencies are listed below for general guidance:-

1. Railway land is a very scarce resource, and therefore, it is of paramount importance to utilize the available railway land most optimally. First and foremost, the railway boundary should be correctly indicated, after due verification, in the GAD. It is desirable to avoid locating piers / abutment, (including foundation) inside the railway land by selecting suitable spans.
2. Alignment of ROB should preferable be at right angle to the track / railway land. If this is not possible then the skew angle should be minimum.
3. General arrangement and lay out to be shown along with dimensions and clearances. Design details should not be part of GAD. The design of girders, piers, foundation, abutment etc. should be carried out separately considering the prevalent site conditions, so that cost / design are optimized.
4. Mention of consultant / concessionaire name etc on the GAD should be avoided.
5. Size of the drawing should be A-1 with standard signature template.
6. GAD should be prepared on Auto CAD.
7. Instructions circulated by Rly. Board / N. Rly., like provision of stair case, service lane, pedestrian footpath etc. should be included in the GAD.
8. Check list has also been pruned down and revised check list is enclosed for guidance.

संलग्न: जैसा ऊपर दिया है

Give

प्रतिलिपि: (1) मुख्य प्रशासनिक अधिकारी / निर्माण:

2) मुख्य प्रशासनिक अधिकारी /

3) मंडल रेल प्रबंधक: फिरोजपुर, अंबाला, दिल्ली, मुरादाबाद, लखनऊ

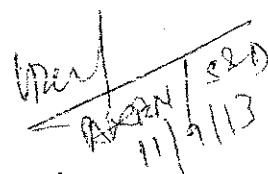
मुख्य पुल इंजीनियर, उत्तर रेलवे, उत्तर रेलवे
कृपया जानकारी और आवश्यक कार्रवाई के लिए
कृपया जानकारी और आवश्यक कार्रवाई के लिए
कृपया जानकारी और आवश्यक कार्रवाई के लिए

Amhan
(एन के सिन्हा) 11/9

o/c

Check list for examination of GAD of ROB / RUB and Limited height Subway

Sr. No.	Points to be Checked	Reference
A) GENERAL INFORMATIONS :-		
1	Space provided for Marking HQ GAD / Drg.No.	IRWM 904(a)
2	Name of the work and sponsoring agency if any along with its consent/signature	IRWM 904(a)
3	Location of LC No. / Existing Bridge No, it's km, adjoining stations, local name if any and section. If on DFC route be specifically mentioned.	IRWM 904(a)
4	Scale of the Drawing.	IRWM 905(a)
5	300 mtr of track alignment on either side be shown on both sides.	Rly.Bd's letter No. 98/CE-I/Misc/10 / Pt. dtd.26.8.98.
6	Centrelines of the proposed alignment as well as the piers are marked on a grid with respect to some common reference axis.	-
B) NOTES ESSENTIALLY BE WRITTEN ON GAD.		
1	All dimensions are in millimetres.	-
2	GAD governing codal provisions to be mentioned.	-
3	Designs should be done after site investigations to ensure safety along with adequate drainage.	-
4	CRS sanction to be obtained as per the norms where required.	Rly.Bd's letter No. 2001/CE-I/Misc/NH/4/Pt-III dtd.28.06.10
5	Provision has been made for 275 mm extra vertical clearance for 80 kg. rail and concrete sleeper.	SOD 10(III)
6	Facilities for inspection of ROB to be provided.	-
7	All admissible levies to railway be ensured prior to the approval of GAD	-
8	2 mtr high RCC wall to be provided 50mtr long on both side of ROB at Northern Railway Boundary to avoid trass passes. Foot path for pedestrians on both sides of ROB on the Deck protected by sufficient high Railing / RCC wall (2mtr. High). Provision of staircase, provision of service lane etc. should be included in the GAD.	308-W/O/Genl./BR:(S&D) Pt-II, dtd. 13.7.12
9	Necessary MOU / Agreement should be drawn with Authority i.e. NHAI/State Govt. (only for Govt. officials) prior to / during the execution of work.	Engg. Code.IRC-1816(a)
10	Suitable note in connection with feasibility for constructing Limited Height Subway along with ROB.	-
11	State Govt. shall ensure closure of L. Xing soon after the bridge is commissioned.	Rly.Bd's letter No. 2011/C-IV/Misc/48/Land dtd.17.3.12
12	For closing of LC gate-a separate plan will be prepared.	-
13	No. of Col. & DIA of columns are tentative subject to final design mentioned on GAD.	-
14	GAD Approved subjected to the following observations :-	-
	a) All dimensions including foundation details, Girder's Depth & Width, Piers & Abutments Sub Structure & Super structure details should be finalised after detailed design based on soil investigation and duly approved by Competent Authority.	-
	b) The spacing of Girders and Structural details are to be decided as per design requirement keeping the finished top of ROB's slab at the same level.	-
C) FOLLOWING INFORMATIONS BE SHOWN ON GAD.		
a) <u>SITE PLAN</u>		
1	North Direction.	IRWM 906(a - i)
2	Railway TP or OHE Mast on either side of ROB.	Rly.Bd's letter No. 98/CE-I/Misc/10 / Pt. dtd.26.8.98.
3	Level Crossing gate number class (Engg. / Traffic) alongwith TVU etc, exact location of level crossing gate with respect to Railways TPs or OHE Mast	IRWM 906(a - xv)



 11/9/13